TRANSLATION OF JP 06218792

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Industrial Application] This invention relates to the manufacture approach of a sheet plastic, and equipment.
[0002]
[Description of the Prior Art] There are some which are shown in JP,4-2087,B as the manufacture approach of the conventional sheet plastic, and equipment. As for the manufacturing installation of the sheet plastic shown in this, melting resin feed tubing which can send in melting resin is connected to the side face of the extrusion head, and opposite arrangement of the interior material of a proposal of the pair constituted by the extrusion head bottom by the two straight-lines-like bar which can rotate freely, respectively is carried out at right and left. The extrusion head consists of the annular die, the core inserted in the die, a core and the mandrel constituted by one, and an annular member prepared in the periphery of a mandrel, and the above-mentioned melting resin feed tubing is attached in the side face of an annular member. Between the mandrel and the annular member, the resin extrusion way which a resin inflow way opens for free passage on the above-mentioned resin inflow way between a die and a core again is prepared, respectively. The passage regulation tee material which regulates annular passage to a core and is made right and left for 2 minutes has projected to two places which counter in the diameter direction. Melting resin is made to flow into the extrusion head from melting resin feed tubing first at the time of manufacture of a sheet plastic. Melting resin becomes annular while passing through a resin inflow way, it is carried out on a resin extrusion way for 2 minutes, and is extruded from the lower part of the extrusion head. The extruded hemicycle plastics of two sheets is guided by the interior material of a proposal in the direction in which opposite spacing spreads, is made the shape of a sheet, and is arranged between division metal mold on either side, respectively.
[0003]
[Problem(s) to be Solved by the Invention] However, with the manufacture approach of the above-mentioned conventional sheet plastic, and equipment, in order to create a sheet from parison, passage regulation tee material projects from a core, and since two places of a resin extrusion way will be blocked, it cannot be said by moving a core to shaft orientations to a die that the width method of a resin extrusion way is changed. Therefore, since it is necessary to reinsert in a die the core from which the direction dimension of a path is different to change the thickness of a sheet, there is a problem that a sheet cannot

be formed, changing the thickness of the vertical direction continuously. Thereby, in order to have to double the thickness of parison with the thickness of the part which becomes the thickest as mold goods, it has the problem that the weight of the increase of a useless heavy-gage part and mold goods will increase. Moreover, although there is also a method of changing the thickness of a sheet continuously by changing the rate which carries out the pinch of the extruded sheet and pulls it caudad in order to solve this problem, there is a problem that equipment becomes large-scale and cost becomes high. This invention is for solving such a technical problem.

[0004]

[Means for Solving the Problem] This invention solves the above-mentioned technical problem by adjusting thickness and preparing the expansion member which can be developed in the shape of a sheet in the lower part of the parison output of the accumulator head which can hang parison for the parison cut in parison with the cutting cutting edge which can be cut in the vertical direction. That is, it develops by the expansion member to which a path increases, and the manufacture approach of the sheet plastic of this invention is made into the shape of a sheet, so that it goes caudad, while it cuts the parison which parison was made to hang and hung in the vertical direction with a cutting cutting edge, adjusting thickness from an accumulator head. Moreover, the manufacturing installation of the sheet plastic of this invention is characterized by having the expansion member which thickness is adjusted, it is prepared in the parison output lower part of the accumulator head which can hang parison from a parison output, and an accumulator head, and parison is prepared by the lower part of the cutting cutting edge which can be cut in the vertical direction, and a cutting cutting edge, and has the circular-cone-like section which can be developed in the shape of a sheet for the cut parison.

[0005]

[Function] Parison is outputted continuously, changing the width method of a parison output and adjusting the thickness of parison by moving the core of an accumulator head in the vertical direction in a cylinder. The cutting cutting edge in which it was prepared by the lower part of a parison output cuts continuously the parison outputted from the parison output in the vertical direction. It develops by the expansion member which has the circular-cone-like section arranged in this cut parison at the lower part of a cutting cutting edge. Thereby, the sheet plastic with which thickness was changed partially is obtained in the output direction.

[0006]

[Example] The example of this invention is shown in drawing 1 . The ring piston 14 is inserted in the inner circumference section of the cylinder 12 of the accumulator head 10. The ring piston 14 is movable to shaft orientations by the injection cylinder 18 through a piston rod 16. The core 20 which fixed in the cylinder 12 penetrates the ring piston 14 in the core of the accumulator head 10, and is prepared in it. The annular die 22 is attached in the lower limit section of a cylinder 12. The core 24 of a die 22 and this alignment is arranged in the lower limit of a core 20. The core 24 is movable to shaft orientations by the oil hydraulic cylinder 28 for thick adjustment through a spindle 26. The extruder 30 is connected with the method of drawing 1 Nakagami of the accumulator head 10. The extruder 30 is connected to the annular free passage way 32 formed between the core 20, the cylinder 12, and the ring piston 14. The free passage way 32 is opened for free passage with the annular die slit 34 (parison output) formed between a spindle 26 and the

oil hydraulic cylinder 28 for thick adjustment. When a core 24 moves the die slit 34 to shaft orientations by the oil hydraulic cylinder 28 for thick adjustment, the width method of this, i.e., a radial dimension, changes. As shown in drawing 2 , the cutting cutting edge 36 which can cut the parison 35 extruded from the die slit 34 under the die 22 is formed. The cutting cutting edge 36 is movable in the direction of a path of a die 22 by the air cylinder 38 in between the locations which do not cut [the location which can be cut in the vertical direction and] parison 35. More below than the cutting cutting edge 36 of a die 22, the expansion member 40 of a truncated-cone form is arranged at a core 24 and the same axle. The expansion member 40 can develop the parison 35 cut with the cutting cutting edge 36 in the shape of a sheet. The pinch of the sheet 41 developed by the expansion member 40 is carried out from the longitudinal direction in drawing 1 , and the guide roll 42 guided between the below-mentioned metal mold 46 and 48 is formed in the cutting cutting edge 36 of the expansion member 40, and the lower part of the location which counters. The making machine 44 is formed in the lower part of the guide roll 42. Metal mold 46 and 48 is arranged at the making machine 44 so that the guide roll 42 may be located in the middle. Metal mold 46 and 48 is movable to the longitudinal direction in drawing 1 by oil hydraulic cylinders 50 and 52 respectively.

[0007] Next, actuation of this example is explained. The melting resin extruded in the free passage way 32 from the extruder 30 moves the free passage way 32 to the method of drawing 1 Nakashita. Subsequently, the melting resin which moved to the drawing 1 Nakashita edge of the ring piston 14 is extruded from the die slit 34 to tubed outside by operating the injection cylinder 18 and moving the ring piston 14 to the method of drawing 1 Nakashita. By operating the oil hydraulic cylinder 28 for thick adjustment, moving a core 24 to the method of drawing 1 Nakagami at this time, and making the width method of the die slit 34 small By making thin thickness of the parison 35 extruded outside from the die slit 34, and moving a core 24 to the method of drawing 1 Nakashita conversely, and enlarging the width method of the die slit 34 Thickness of the parison 35 extruded from the die slit 34 can be thickened, and the thickness of parison 35 can be adjusted continuously. A predetermined location is cut in the vertical direction by the cutting cutting edge 36 which the parison 35 extruded from the die slit 34 moved to the lower part of the die slit 34 by the air cylinder 38. Subsequently, it is developed by the expansion member 40 in the shape of a sheet, and with the guide roll 42, the pinch of this cut parison 35 is carried out from the longitudinal direction in drawing 1 , and it is guided in the mid-position of metal mold 46 and 48. Subsequently, the oil hydraulic cylinders 50 and 52 of a making machine 44 are operated, the mold clamp of the metal mold 46 and 48 is carried out, and it is fabricated. Thereby, the mold goods to which thickness was changed continuously can be fabricated. In addition, in the above-mentioned example, by not restricting to this, although the cutting cutting edge 36 is formed in one place, and forming a cutting cutting edge in two places, parison 35 can be used as the sheet of two sheets, and it can be used also for the blow molding approach. Moreover, a sheet 41 can also be made to hang more certainly by connecting a motor to the above-mentioned guide roll 42. Moreover, the motor linked to the guide roll 42 can be connected to a controller, and the rate of the hanging sheet 41 can also be controlled. Moreover, the expansion member 40 can be held by the arm from the back of a making machine 44, for example, can prepare mechanical components, such as an air cylinder, and can also be made to move them for every cycle.

[0008]
[Effect of the Invention] According to this invention, the cutting cutting edge which can cut parison in the parison output lower part of the accumulator head which can adjust the thickness of parison, and the sheet plastic with which thickness was partially adjusted in the output direction in the cut parison by preparing the expansion member which can be developed in the shape of a sheet can be obtained.

[Translation done.]

NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

EXAMPLE

[Example] The example of this invention is shown in drawing 1 . The ring piston 14 is inserted in the inner circumference section of the cylinder 12 of the accumulator head 10. The ring piston 14 is movable to shaft orientations by the injection cylinder 18 through a piston rod 16. The core 20 which fixed in the cylinder 12 penetrates the ring piston 14 in the core of the accumulator head 10, and is prepared in it. The annular die 22 is attached in the lower limit section of a cylinder 12. The core 24 of a die 22 and this alignment is arranged in the lower limit of a core 20. The core 24 is movable to shaft orientations by the oil hydraulic cylinder 28 for thick adjustment through a spindle 26. The extruder 30 is connected with the method of drawing 1 Nakagami of the accumulator head 10. The extruder 30 is connected to the annular free passage way 32 formed between the core 20, the cylinder 12, and the ring piston 14. The free passage way 32 is opened for free passage with the annular die slit 34 (parison output) formed between a spindle 26 and the oil hydraulic cylinder 28 for thick adjustment. When a core 24 moves the die slit 34 to shaft orientations by the oil hydraulic cylinder 28 for thick adjustment, the width method of this, i.e., a radial dimension, changes. As shown in drawing 2 , the cutting cutting edge 36 which can cut the parison 35 extruded from the die slit 34 under the die 22 is formed. The cutting cutting edge 36 is movable in the direction of a path of a die 22 by the air cylinder 38 in between the locations which do not cut [the location which can be cut in the vertical direction and] parison 35. More below than the cutting cutting edge 36 of a die 22, the expansion member 40 of a truncated-cone form is arranged at a core 24 and the same axle. The expansion member 40 can develop the parison 35 cut with the cutting cutting edge 36 in the shape of a sheet. The pinch of the sheet 41 developed by the expansion member 40 is carried out from the longitudinal direction in drawing 1 , and the guide roll 42 guided between the below-mentioned metal mold 46 and 48 is formed in the

cutting cutting edge 36 of the expansion member 40, and the lower part of the location which counters. The making machine 44 is formed in the lower part of the guide roll 42. Metal mold 46 and 48 is arranged at the making machine 44 so that the guide roll 42 may be located in the middle. Metal mold 46 and 48 is movable to the longitudinal direction in drawing 1 by oil hydraulic cylinders 50 and 52 respectively.

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[Translation done.]

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is drawing showing the example of this invention.
[Drawing 2] It is the detail drawing from the accumulator head lower part to a guide roll.
[Description of Notations]
10 Accumulator Head
34 Die Slit (Parison Output)
36 Cutting Cutting Edge
40 Expansion Member

[Translation done.]